## AMENDMENTS TO THE CLAIMS

Please amend the current claims as follows:

Claims 1 – 10 (Cancelled)

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11. (Currently Amended) A method for making ~~an index-guided, buried heterostructure~~ a nitride ~~laser diode~~ light emitting structure comprising the ~~steps~~ operations of:

providing a ridge structure having an active region a ~~first, second, and third surface, said ridge structure comprising a cladding structure and a cladding layer with a multiple quantum well structure interposed between said cladding structure and said cladding layer~~; ~~and~~

adding a burying layer overlying said ~~first, said second and said third surface of said~~ ridge structure, said ridge structure forming a guiding surface where the burying layer contacts the active region, the guiding surface providing index guiding in the ridge structure during operation of the light emitting structure~~said burying layer having an opening to said third surface of said ridge structure for electrical contact~~.

12. (Currently Amended) The method of Claim 11 wherein the ridge structure includes a lower cladding layer below the active region, said lower cladding layer being ~~structure is~~ a shortperiod superlattice.

13. (Original) The method of Claim 11 wherein said ridge structure is oriented along the <1100> crystallographic direction.

14. (Original) The method of Claim 11 wherein said burying layer is p-doped.

15. (Currently Amended) The method of Claim 11 wherein a tunnel barrier layer adjoins ~~said~~ a multiple quantum well structure in the ridge structure.



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16. (Currently Amended) A method for making a ~~an index-guided, buried heterostructure~~ nitride ~~laser diode~~ light emitting structure comprising the ~~steps~~ operations of:

providing a ridge structure having a ~~first, a second, and a third surface, said ridge structure comprising a cladding structure and a cladding layer with~~ a multiple quantum well structure ~~interposed between said cladding structure and said cladding layer~~;

adding a first burying layer overlying ~~said first, said second and said third surface of~~ said ridge structure, said first burying layer having an opening to said third surface of said ridge structure for electrical contact, a guiding surface forming where the first burying layer contacts the multiple quantum well structure, the guiding surface providing index guiding in the ridge structure during operation of the light emitting structure; and

adding a second burying layer overlying said first burying layer, such that said second burying layer is in contact with said ~~third~~ a top surface of said ridge structure.

17. (Original) The method of Claim 16 wherein said first burying layer is n-doped.

18. (Original) The method of Claim 16 wherein said second burying layer is comprised of magnesium doped GaN.

19. (Original) The method of Claim 16 wherein said ridge structure is oriented along the <1100> crystallographic direction.

20. (Original) The method of Claim 16 wherein said cladding structure is a shortperiod superlattice.

21. (New) The method of Claim 16 wherein the operation of providing a ridge structure is an etching process.



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22. (New) The method of Claim 21 wherein the etching is a reactive ion etch.

23. (New) The method of Claim 21 wherein the etching is an ion beam etching.

24. (New) The method of Claim 16 wherein the operation of adding a first burying layer is by growing the first burying layer.

25. (New) The method of Claim 22 wherein a metal organic chemical vapor deposition is used in the growing process.

26. (New) The method of Claim 23 wherein the opening in the burying layer is formed by etching the burying layer.

27. (New) The method of Claim 11 wherein the providing of the ridge structure uses an etching process.

28. (New) The method of Claim 27 wherein the etching process is a reactive ion etch.

29. (New) The method of Claim 27 wherein the etching process is an ion beam etch.

30. (New) The method of Claim 27 wherein the etching process is a chemical assisted ion beam etching process.

31. The method of Claim 27 wherein the etching process is an inductively coupled plasma etch.

32. (New) The method of Claim 11 wherein the operation of adding a burying layer involves growing the burying layer.



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33. (New) The method of Claim 11 wherein metal organic chemical vapor deposition is used to grow the burying layer.

34. (New) The method of Claim 11 further comprising the operation of:

etching an opening into the burying layer, the opening to provide an electrical contact.



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